



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: **IECEX CSA 23.0045X** Page 1 of 3 [Certificate history:](#)
Status: **Current** Issue No: 0
Date of Issue: 2023-12-07
Applicant: **MICRO SENSOR CO., LTD.**
No.18 Yingda Road, Weibin District,
Baoji City, Shaanxi Province,
China
Equipment: **Pressure Transmitter, model MPM458GUHP.**
Optional accessory:
Type of Protection: **Increased Safety ec and Intrinsically Safe ic**
Marking: **Ex ec ic IIC T6...T4 Gc**
T4: -20°C to +85°C
T5: -20°C to +70°C
T6: -20°C to +50°C

Approved for issue on behalf of the IECEx
Certification Body:

Dave Magee

Position:

Senior Director of Operations, Toronto

Signature:
(for printed version)

Date:
(for printed version)

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.



Certificate issued by:

CSA Group
178 Rexdale Boulevard
Toronto, Ontario M9W 1R3
Canada





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Manufacturer: **MICRO SENSOR CO., LTD.**
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Manufacturing
locations: **MICRO SENSOR CO., LTD.**
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China

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEX Quality system requirements. This certificate is granted subject to the conditions as set out in IECEX Scheme Rules, IECEX 02 and Operational Documents as amended

STANDARDS :

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

[IEC 60079-0:2017](#) Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

[IEC 60079-11:2011](#) Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

[IEC 60079-7:2017](#) Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
Edition:5.1

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Report:

[CA/CSA/ExTR23.0036/00](#)

Quality Assessment Report:

[NO/DNV/QAR21.0025/02](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

MPM458GUHP series Pressure Transmitter is a pressure monitoring and measurement apparatus for use in Zone 2 hazardous area. Pressure sensor and subsequent electronics are used to convert the physical pressure into an electrical signal.

The housing of apparatus is constructed from stainless steel housing provided with an Aviation connector for external connection and it houses printed circuits boards and a pressure sensor inside.

Refer to the Annexe for additional information including Entity Parameters.

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. The pressure transmitter shall be connected in compliance with IEC 60079-14 requirements, providing and maintaining degree of protection at least IP54 according to IEC 60079-0 requirements when the mating connector is supplied by the end user.

Annex:

[IECEX CSA 23.0045X Annexe Issue 0.pdf](#)

Annexe to: IECEx CSA 23.0045X Issue 0

Applicant: MICRO SENSOR CO., LTD.

Apparatus: Pressure Transmitter, model MPM458GUHP



The apparatus provides two types of circuits and output signal corresponding circuits are defined by the model configuration code as follows:

MPM458GUHP	a	b	c	d	e	f
Pressure transmitter	Measurement range	Pressure type	Accuracy	Output signal	Structural material	Process connection

The following configurator options are relevant to the certifications:

Configuration code 'd' represents output signal.

Configurator code	Option	Description
d – Output signal	E	4mA to 20mA DC
	V	0V to 10V DC

Configuration code 'e' represents structural material.

Configurator code	Option	Description
e - structural material	28	Stainless steel 316L

Entity parameters:

Type	Power supply	Output signal
Current (2-wire)	11V to 28V DC	4mA to 20mA DC
Voltage (3-wire)	15V to 28V DC	0V to 10V DC

Temperature class depends on the ambient temperature range as follow:

Temperature class	Ambient temperature
T4	-20°C to +85°C
T5	-20°C to +70°C
T6	-20°C to +50°C

Conditions of Manufacture

1. The pressure transmitter shall be subjected to a dielectric strength test at 500 Vac at least 60 s without dielectric breakdown occurring between circuit and metal enclosure according to IEC 60079-7:2017, Clause 6.1. Alternatively, the test may be carried out at 600Vac for at least 100ms.